

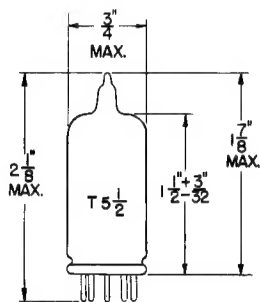
**6AN5**
**Description and Rating**
**BEAM POWER AMPLIFIER**
**GENERAL DESCRIPTION**

Principal Application: The 6AN5 is a miniature beam-power amplifier designed for use as a wide-band radio-frequency or video power amplifier in equip-

ments with relatively low plate supply voltages. The tube is capable of operation at high plate current levels and exhibits a high transconductance.

Cathode: . . . . . Coated Unipotential  
 Heater Voltage (A-C or D-C) . . . . . 6.3 Volts  
 Heater Current . . . . . 0.45 Ampere  
 Envelope: . . . . . T-5½, Glass  
 Base: . . . . . E7-1, Miniature Button 7-Pin

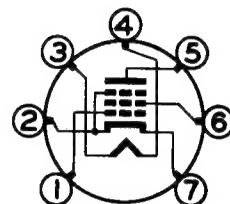
Mounting Position: . . . . . Any  
 Direct Interelectrode Capacitances: #  
 Grid 1 to Plate (Max) . . . . . 0.075  $\mu\text{f}$   
 Input . . . . . 9.0  $\mu\text{f}$   
 Output . . . . . 4.8  $\mu\text{f}$

**PHYSICAL DIMENSIONS**


RTMA 5-2

**TERMINAL CONNECTIONS**

Pin 1 - Grid Number 1  
 Pin 2 - Cathode and Beam Plates  
 Pin 3 - Heater  
 Pin 4 - Heater  
 Pin 5 - Plate  
 Pin 6 - Grid Number 2 (Screen)  
 Pin 7 - Cathode and Beam Plates

**BASING DIAGRAM**

 RTMA 7BD  
 BOTTOM VIEW

**DESIGN CENTER VALUES:**

Plate Voltage . . . . .	120	300	Volts
Screen Voltage . . . . .	120	300	Volts
Plate Dissipation . . . . .	4.2	1.70	Watts
Screen Dissipation . . . . .	1.4	0.56	Watts
Cathode Current . . . . .	50	20	Milliamperes
Bulb Temperature at Any Point . . . . .	140	140	Centigrade
Grid Number 1 Circuit Resistance			
With Fixed Bias *	0.1	0.1	Megohm
With Cathode Bias	0.1	0.1	Megohm

**MAXIMUM RATINGS**
**CLASS A<sub>1</sub> AMPLIFIER**

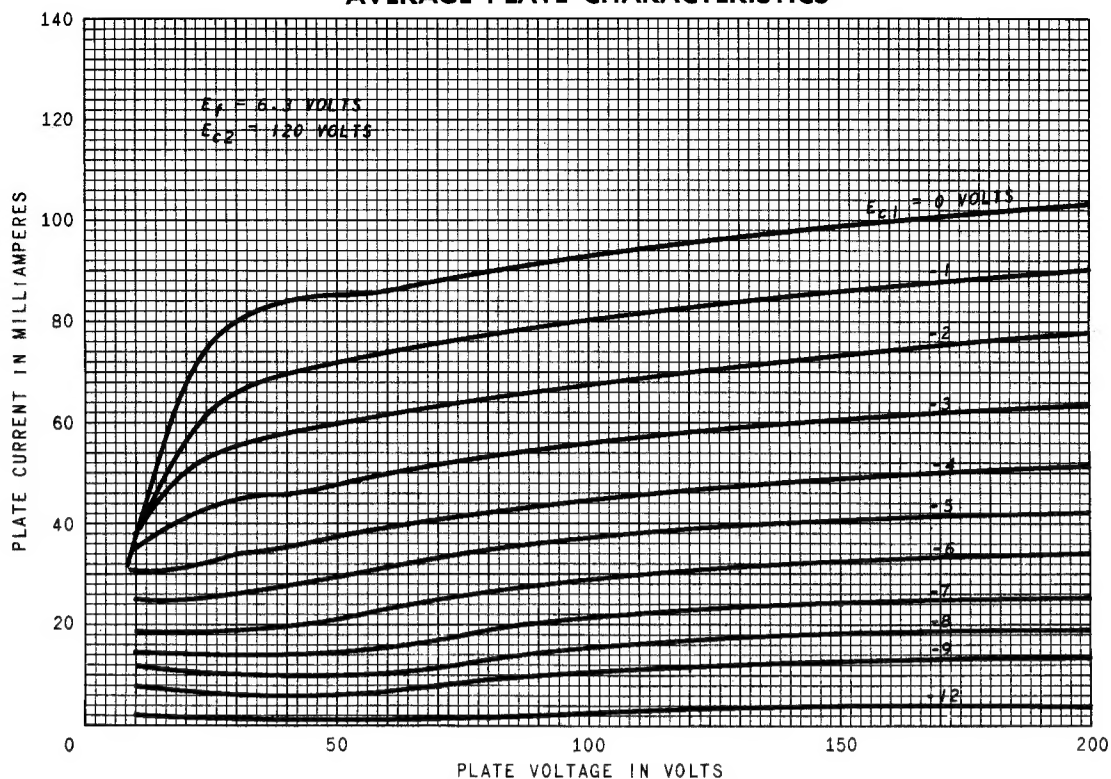
Plate Voltage . . . . .	120	Volts
Screen Voltage . . . . .	120	Volts
Cathode Bias Resistor . . . . .	120	Ohms
Plate Resistance (Approx) . . . . .	12500	Ohms
Transconductance . . . . .	8000	Micromhos
Plate Current . . . . .	35	Milliamperes
Screen Current . . . . .	12	Milliamperes
Load Resistance . . . . .	2500	Ohms
Power Output (Approx) . . . . .	1.3	Watts
Plate Current (Max) for $E_{c1} = -20$ Volts . . . . .	1.0	Milliampere

**CHARACTERISTICS AND TYPICAL OPERATION**

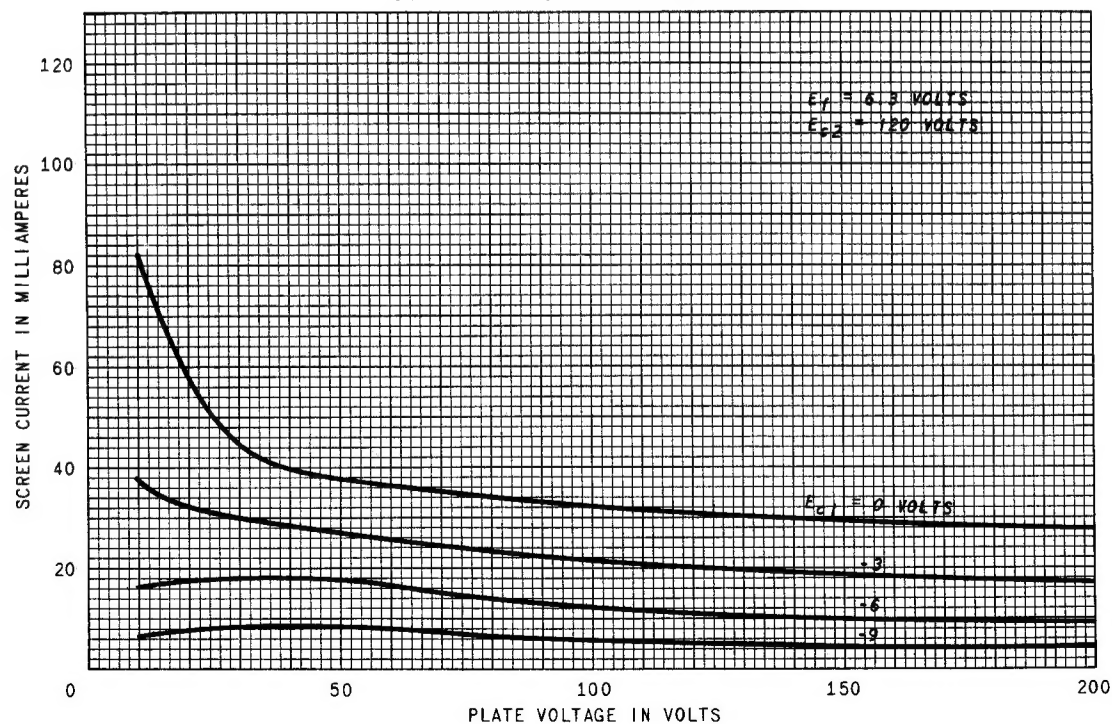
# With external shield #316 connected to cathode

\* Fixed bias operation is recommended only when the plate and screen dissipation is less than 70 percent of the design-center maximum ratings.

## AVERAGE PLATE CHARACTERISTICS



## AVERAGE CHARACTERISTICS



Tube Department, Electronics Division

**GENERAL**  **ELECTRIC**

Schenectady, N. Y.